

APPENDIX B

Office Action – Responses to Examiner Comments

<i>Item</i>	<i>Claims</i>	<i>Examiner Comment</i>	<i>Response to Examiner Comment</i>
4		<p>Quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:</p> <p>(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.</p>	
5	1-3, 22, 23, 29, 31, 32, 34	<p>Rejected under 35 U.S.C. 103(a) as being unpatentable over Cummings U.S. Patent No. 5,301-105 (as previously applied) in view of Pitroda, U.S. Patent No. 5,590,038 (as previously applied).</p>	<p>See comments below. Also, a feature comparison of Johnson, Cummings, Pitroda, Ertel and Edelson is in a separate table following this one that will show Johnson's patent was incorrectly rejected.</p>
6	1	<p>Cummings teaches an integrated health care system for collecting, consolidating, conforming, and distributing health care data concerning at least one individual service recipient, the system comprising: at least one central host computer for maintaining, consolidating, and distributing information generated by any component of said system; wherein said centralized host computer is one of a computer, or a network of linked computers having at least one central server; at least one provider terminal in communication with said central host computer; wherein said provider terminal is one of a portable computer, personal information device, personal digital assistant, personal computer, or server computer; at least one portable individual information device for accessing said</p>	<p>Johnson Claim 1 states: "An integrated health care system for collecting, consolidating, conforming, and distributing health care data concerning at least one individual service recipient, the system comprising: at least one central host computer for maintaining, consolidating, and distributing information generated by any component of said system; wherein said centralized host computer is one of a computer, or a network of linked computers having at least one central server; at least one provider terminal in communication with said central host computer; wherein said provider terminal is one of a portable computer, personal information device, personal digital assistant, personal computer, or server computer; at least one portable individual information device for accessing said</p>

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			<p>system; wherein said portable individual information device is any of an integrated circuit card, a magnetic storage card, or a portable integrated circuit or microchip-based device; a billing module for calculating billing information for a service provided to the at least one individual service recipient; an insurance benefits module for calculating available insurance benefits for a service provided to the at least one individual service recipient; a payment module for electronically transferring funds to pay a bill for services provided to the at least one individual service recipient; an authorization module for authorizing service recipient treatment; a messaging module for providing messaging services to a component of said system; wherein said at least one service recipient's health care data records are stored on said central host computer, said provider terminal, and said individual information device; wherein said central host computer, said provider terminal, and said portable individual information device are electronically linked as a network, to permit information distribution to various locations on said network wherein said system is implemented using any of a global communications network, the Internet, or a local area network; wherein said individual information device stores any of an individual service recipient's insurance information, emergency records, and health care history; wherein said provider terminal includes: a medical insurer module; a health plan sponsor module; an individual service recipient module; a health care service provider module; a health care research module; and a service support module. Wherein said medical insurer module includes functions for plan definition, open enrollment marketing features, automated authorization of benefits, automated referrals, and service payment accounting and: wherein said health plan sponsor module includes functions for open enrollment processes, benefit plan information maintenance, and coordination of distribution and activation or deactivation of individual information devices; wherein said health care service provider module includes functions for maintaining service recipient records, diagnosing and treating service recipient ailments, managing service payments, accounting services, and maintaining service provider records, including licensing information, staffing affiliations, organizational ownership information, tax identification information, curriculum vitae of licensed practitioners, as well as</p>

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			<p>information regarding disciplinary actions; wherein said health care research module includes functions for collecting data on said system for research and analysis of health care issues; wherein said service support module includes functions for service parameter maintenance, product support, customer requests, and system maintenance; wherein said system provides access to Social Security, annuity, retirement account, and benefit information; and wherein said medical insurer module, said health plan sponsor module, said individual service recipient module, said health care service provider module, said health care research module, and said service support module each include databases for storing information; and, wherein said information is linked and organized by at least one indexing key."</p>	
	<p>As will be evident throughout the comments below, Cummings, even if designed – which it was not – would not contain the functionality of Johnson's invention.</p>		<p>Cummings column 4, lines 4-21 defines that the system is composed of a processing system linked to a terminal, printer and monitor with a CRT screen. Figure 1, element 10 is a box labeled "Processing System." Every system will include hardware or it wouldn't be a computer system. It is merely the environment in which the system operates and is available to and necessary for all systems. In addition, Cummings does not include the other hardware and firmware components (i.e. portable individual information device, personal information device, personal digital assistant, integrated circuit card, magnetic storage card, portable integrated circuit or microchip-based device, server computer, etc.) that Johnson does.</p>	
	<p>wherein said centralized host computer is one of a computer, or a network of linked computers having at least one central server (see column 4, lines 4-21);</p> <p>at least one provider terminal in communication with said central host computer (see column 4, lines 4-21);</p> <p>at least one provider terminal in</p>	<p>Distributed processing means linked computers. This is merely a hardware environment.</p>	<p>Same as above.</p>	
			<p>Same as above. Element 11 (physician office terminals), element 24</p>	

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		communication with said central host computer (see column 4, lines 4-21, in particular, Figure 1, elements 11,24, 27 and 28);	(insurance companies), element 27 (banks/financial institutions) and element 28 (employer) only show terminals in each location.
	wherein said provider terminal is one of a portable computer, personal information device, personal digital assistant, personal computer, or server computer (see column 7, lines 17-25);	No, Cummings does not teach "provider terminal" as "one of a portable computer, personal information device, personal digital assistant, personal computer, or server computer"; Johnson does.	<p>Cummings states "The terminal of Fig. 2 includes a main housing 50 having a visual display window 51, a card data entry slot 52 having an elongated portion 53 and an enlarged portion 54, conventional manual data entry keyboard 55 and 10-key numeric calculator 56. It also includes conventional telephone handset cradle 57 and telephone handset 58. As will be evident from reference to Fig. 2, the terminal is operative in accordance with techniques well known in the data processing arts." Johnson is a very senior designer, skilled in the "data processing arts" and notes that this is a telephone with a display, it is not a portable computer, personal digital assistant, personal computer, or server computer. Cummings does not include the other hardware and firmware components (i.e. portable individual information device, personal information device, personal digital assistant, integrated circuit card, magnetic storage card, portable integrated circuit or microchip-based device, server computer, etc.) that Johnson does. It is not applicable.</p>
	a billing module for calculating billing information for a service provided to the at least one individual service recipient (see column 5, lines 2-8);	No. Cummings does not provide a billing module for calculating billing information for a service provided to the at least one individual service recipient; Johnson does, managing the functions in modules 108, 110, 112 and 148 using databases 122, 102, 104, and 114 and shared platform services 178, 180, 182, 184, 186, 188, 190 and 192.	<p>Cummings states "Claims File 20. There is stored detailed information covering relevant items of interest in ensuring accurate administration of claims in accordance with applicable criteria. Included are items such as those relating to claims histories, claims under review and claims in process." There is no design of a billing function or data used to create such a function. This claim involves only these words.</p>
	an insurance benefits module for calculating	No. Cummings does not provide a billing module for calculating billing	

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		available insurance benefits for a service provided to the at least one individual service recipient (see column 4, lines 53-68);	<p>In column 4 lines 53-68 Cummings states "For situations in which an insurance company is involved, relevant insurance company information and benefits as represented by Insurance Company File 18. Examples of pertinent information in such File 18 include the identification of covered illnesses and procedures, limits on insurance company payments for various illnesses and procedures, treatments and procedures for which utilization review is required, and treatments and procedures for which second opinions are necessary. Since the system hereof contemplates compatibility with conventional insurance provisions that include patient deductibles, co-insurance by patient or another company and various other considerations that require selected individualized historical and other data to be recorded for each participant, system memory either includes or has access to files for each person as denoted by the Insured File 19."</p>
		a payment module for electronically transferring funds to pay a bill for services provided to the at least one individual service recipient (see column 3, lines 22-26);	<p>Data must be entered in storage or connections must be made to existing databases while local storage and processes must be defined within the system for access to data to be possible. Cummings does not understand this, as he summarizes the requirements as "system memory." There is no RAM capability that could maintain such data and there is no means defined within Cummings invention to obtain the data necessary. His claim is only in his words and there is no design to support it.</p> <p>No. Cummings does not provide a payment module for electronically transferring funds to pay a bill for services provided to the individual service recipient; Johnson does, managing the functions in modules 108, 110, 112 and 148 using databases 122, 102, 104, and 114 and shared platform services 178, 180, 182, 184, 186, 188, 190 and 192.</p>

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			<p>physicians and other health care providers.” Cummings not only includes no definition of the process or of a design, but this is not even the method by which payments for medical services are made. Banks do not authorize payments, they provide funds transfer capabilities only and account parameters must be known and configured once authorization is secured. Cummings has no knowledge of this.</p>
	<p>an authorization module for authorizing service recipient treatment (see column 11, lines 37-43);</p>	<p>Cummings states “The System interrogates the Insurance Company (or other payor) files, e.g. file 18 in Fig. 1, and verifies that the ICD9 codes either meet or do not meet applicable criteria. This is noted by rectangle 128. In so doing, the expense associated with the incident is considered as a claim and is reviewed as noted by rectangle 129 ‘Verify Claim for Proper Treatment and Charges.’” There is no design either for the “Insurance Company File” or for the process that would be required to enable this function. Cummings only provides the two boxes of text in figure 6, with no definition on how this would occur. It is inoperable as well as irrelevant to Johnson’s functionality.</p> <p>No. Cummings does not teach a messaging module for providing messaging services to a component of said system; Johnson does. Johnson defines a communications/file transfer 192 shared platform service that is used for communications between all system participants of the health care value chain for all communication features of the system. The elements employing this particular shared platform service includes: 106, 100, 116, 108, 110, 112, 120, 124, 126, 130, 132, 134, 140, 148, 142, 144, 160, 166, 164, 170, 172, 174, and 176. This is the messaging module used for her invention. It is not the same as the offhand reference to electronic mail made by Cummings but not even designed into his patent.</p> <p>Cummings states “The inclusion of an electronic mail function is optional and is identified by symbol 15. As will be observed, Electronic Mail 15 is</p>	<p>No. Cummings does not teach an authorization module for authorizing service recipient treatment; Johnson does. Johnson’s design manages the features through modules 134, 108, 110, 144 and 142 with associated databases 102, 122, 104, 114, 162 and 146 as well as the shared services of 178, 180, 182, 184, 186, 188, 190 and 192.</p>

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			linked to Processing System 10 via link 15a. Although provision of the electronic mail is not an essential part of the invention hereof, its inclusion further increases the versatility of the system and may render it more useful in some applications." There is no design or functionality associated with either Cummings Fig 1 or even in the text. It's just a non-functional box added to his drawing with no defined use. It is not part of his system and, as shown, is inoperable.
	Wherein said at least one service recipient's health care data records are stored on said central host computer and said provider terminal (see column 4, lines 30-39);		No. Cummings does not teach at least one service recipient's health care data records stored on a central host computer and provider terminal; Johnson does through the database environment consisting of databases 122, 102, 104, 114, 146 and 162.
			In column 4, lines 30-39 Cummings states "Many processing systems contain substantial memory storage capacity, and the system hereof advantageously employs such memory storage capacity to record a number of important bodies of data and other information. Some of such data and information are represented by the cylinders in Fig. 1. These may either be a part of the memory of the processing system 10 or may be in other data banks that are accessible to the processing system 10." Again, no design and no functionality, as well as a total lack of knowledge about how data is defined, stored, accessed and managed. In addition, there is not even a file for service recipient's health care data records. The bottom line is that Cummings does not include service recipient health care data records at all.
	Wherein said central host computer and said provider terminal are electronically linked as a network, to permit information distribution to various locations on said network (see Figure 1);		Hardware and the telecommunications infrastructure are the environment in which systems operate and are readily available and necessary to all information systems worldwide.
	Wherein said system is implemented using any of a global communications network, the Internet, or a local area network (see Figure 1);		The global communications network, the Internet, or a local area network is part of the telecommunications environment in which all systems will operate. It is a standard network environment.
	Wherein said provider terminal includes: a medical insurer module; a health plan sponsor module; an individual service recipient module; a health care module; and individual service recipient		No, Cummings does not define a medical insurer module, a health plan sponsor module, an individual service recipient module, a health care service provider module, a health care research module and a service

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		module; a health care service provider module; a health care research module; and a service support module (see column 7, lines 50-68);	Cummings column 7, lines 50-68 states "In addition, although the files described within remote memory (e.g., memory within system 61), it is contemplated that at least a portion of such memory is resident physically at or in proximity to terminal(s) 11a-11c within the physician's office. Accordingly, the transaction file 63, procedures file 64 and library file 65 are shown as connected to the microprocessor 60 (rather than central processing system) for illustrative purposes only and not as requiring them to be physically resident at the physician's offices. Fig. 3 also illustrates another feature mentioned above, namely, the provision of an optional high resolution display 66 preferably located in the physician's office so as to permit on-line real time display and visual review of relevant data, test results and the like. Also included are representations 66a-66c which are illustrative of various reports that may be printed out or otherwise prepared in hard copy form by printer 13." First, there is no such thing as "remote memory." Second, there is no detail on what any of these "files" are, how they are constructed or how they are used. Third, there is no design. Finally, this commentary does not cover the detailed design of the health care value chain participant modules defined by Johnson.
		Wherein said medical insurer module includes functions for plan definition, open enrollment marketing features, automated authorization of benefits, automated referrals, and service payment accounting (see column 4, lines 53-52);	No, Cummings does not define a medical insurer module including functions for plan definition, open enrollment marketing features, automated authorization of benefits, automated referrals, and service payment accounting; Johnson does in modules 106, 100, 108, 110, 112 and 116 using databases 122, 102, 104 and 114 and employing the shared platform of services 178, 180, 182, 184, 186, 188, 190 and 192. In Medical Insurer/ Benefit Providers 52 in Figure 3, Johnson has defined her users which include: benefit managers; federal, state and private insurers; business health care coalitions; employers who self-insure or manage their own benefits packages; and annuity and retirement account management organizations.

Although the examiner notes an impossible line sequence, it is assumed

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			<p>that he is referring to column 4, lines 53-62. Cummings states "For situations in which an insurance company is involved, relevant insurance company information and benefits as represented by Insurance Company File 18. Examples of pertinent information in such File 18 include the identification of covered illnesses and procedures, limits on insurance company payments for various illnesses and procedures, treatments and procedures for which utilization review is required, and treatments and procedures for which second opinions are necessary." Again, as with the rest of Cummings, there is no design included on how any of this would work. His patent is from his wording only and even with his wording only does not include the functions or users defined by Johnson.</p>
Wherein said health plan sponsor module includes functions for open enrollment processes, benefit plan information maintenance, and coordination of distribution and activation or deactivation of individuals (see column 9, lines 9-25);			<p>No, Cummings does not define a health plan sponsor module including functions for open enrollment processes, benefit plan information maintenance, and coordination of distribution and activation or deactivation of individual information devices; Johnson does in modules 120, 124, and 126 using databases 122, 102, 104, 114 and 162 and employing the shared platform of services 178, 180, 182, 184, 186, 188, 190 and 192. In Health/ Benefit Plan Sponsors 54 in Figure 3, Johnson has defined her users which include: health and benefit plan management staff, and human resource department staff.</p> <p>Cummings column 9, lines 9-25 involves "the identification of the applicant and the authorization of the applicant to participate in the system as denoted by Is Patient Authorized rectangle 102 . . . If verification by the System reveals that the applicant is not authorized to participate, then an indication thereof is produced. This may take any of a variety of forms such as a visual or audible indication. Such an indication is represented by the rectangle 103 which contains the illustrative message Print "Sorry Not Authorized, Call 1-800-4Health." This has no bearing on Johnson's health plan sponsor module design. In addition, this message does not cover any type of functional system design – it's just a message, and is again indicative of the lack of any systems design in Cummings patent.</p>
Wherein said health care service provider module includes functions for maintaining	No, Cummings does not define a health care service provider module with functions for maintaining service recipient records, diagnosing and		

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		<p>service recipient records, diagnosing and treating service recipient ailments, managing service payments, accounting services, and maintaining service provider records, including licensing information, staffing affiliations, organizational ownership information, tax identification information, curriculum vitae of licensed practitioners, as well as information regarding disciplinary actions (see column 6, line 44- column 7, line 2);</p>	<p>treating service recipient ailments, managing service payments, accounting services, and maintaining service provider records, including licensing information, staffing affiliations, organizational ownership information, tax identification information, curriculum vitae of licensed practitioners, as well as information regarding disciplinary actions; Johnson does in modules 140, 142, 144, 148 and 176 using databases 122, 102, 104, 114, 146 and 162 and employing the shared platform of services 178, 180, 182, 184, 186, 188, 190 and 192. Beyond that, Cummings uses only the term "physician" and does not recognize other health care service providers or their needs. In Medical Service Providers 58 in Figure 3, Johnson has defined her users which include: alliances, associations, networks and systems of providers; ambulance services; ambulatory surgery centers; donor banks including those for blood, tissue and organs; health maintenance organizations; home care agencies; hospices; hospitals; nursing homes; preferred provider organizations; physician offices; psychiatric facilities; public health departments; substance abuse programs; dental service providers; pharmacies; testing facilities; and therapeutic care providers.</p>
		<p>Cummings column 6, line 44 through column 7, line 2 covers "The Physician File 44 is provided to represent several classes of information and data that are useful in practicing the principles of the invention. . . If symptoms are entered into the system terminal (e.g. one of terminals 11a-11c), and an identification of the corresponding illness is requested from the Processing System 10, the physician's file is interrogated and the system prepares a list of the most likely medical condition corresponding to such symptoms, together with the generally approved and/or recommended treatment protocols." Again, there is no design defining how this would be accomplished. The only file Cummings mentions is the "physicians file" which is merely a flat note file, like any word processing file, that would be impossible to search for information or to maintain. Again, Cummings claim here is based only on these words.</p>	<p>Cummings column 6, line 44 through column 7, line 2 covers "The Physician File 44 is provided to represent several classes of information and data that are useful in practicing the principles of the invention. . . If symptoms are entered into the system terminal (e.g. one of terminals 11a-11c), and an identification of the corresponding illness is requested from the Processing System 10, the physician's file is interrogated and the system prepares a list of the most likely medical condition corresponding to such symptoms, together with the generally approved and/or recommended treatment protocols." Again, there is no design defining how this would be accomplished. The only file Cummings mentions is the "physicians file" which is merely a flat note file, like any word processing file, that would be impossible to search for information or to maintain. Again, Cummings claim here is based only on these words.</p>
		<p>Wherein said health care research module includes functions for collecting data on said system for research and analysis of health</p>	<p>No, Cummings does not define any health care research module including functions for collecting data on said system for research and analysis of health care issues; Johnson does in modules 160, 166, 164</p>

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		<p>care issues (see column 10, line 66 – column 11, line 10);</p>	<p>using databases 122, 102, 104, 114, 146 and 162 and employing the shared platform of services 178, 180, 182, 184, 186, 188, 190 and 192. In addition in Medical Research 60 in Figure 3 has defined users including: allied health professional schools and programs; medical schools; nursing schools; public health schools; accreditation organizations; institutional licensure agencies; professional licensure agencies; disease registries; federal, state and local government policy-makers; agencies investigating legal compliance; lawyers; health care researchers and clinical investigators; health care technology developers and manufacturers; health data organizations; health sciences journalists and editors; research centers; medicare peer review organizations; quality assurance companies; risk management companies; utilization review and management companies; and service providers and service recipients.</p>
			<p>Cummings states "After receiving the results of tests and/or other supporting services, the results are entered into the System. This may be performed either by manual keyboard entry or semi-automatically through the communication of appropriate information into the System electronically. This is denoted by rectangle 126 "Input Test Results and Update Record." After the records have been updated to reflect any test results that maybe applicable, provision is made for the attending physician or authorized support staff member to review the diagnosis or proposed treatment protocols and either amend or confirm his proposed course of treatment." Where will the results be entered? There is no file that could be used for this purpose other than the open text file called "Physician File" 44, and that would have no means of accessing data as it is not a database. In addition, this passage of Cummings discusses looking at test results (albeit with no means for doing so) and not for the large scale research and analysis functions defined by Johnson. Cummings is inoperable, as well as irrelevant to health care research.</p>
			<p>No, Cummings does not define any service support module including functions for service parameter maintenance, product support, customer requests, and system maintenance; Johnson does in modules 170, 172, 174, 176, the shared services of 178, 180, 182, 184, 186, 188, 190, 192 and the electronic output archive 194 as well as the database structures 39-48);</p>

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			<p>of 146, 122, 102, 104, 114 and 162, all of which are designed to enable the system to reliably maintain database, security, account, applications and communications capabilities. Cummings does not even know these requirements for a system exist. In Service Support 62 in Figure 3, Johnson has defined her users which include: the agencies and staff for updating and maintaining the system including: service parameter maintenance; product support; customer requests; and system maintenance.</p>
			<p>In the reference made by the examiner, Cummings states "Fig 11 illustrates the aforementioned feature of Post Treatment matters." This refers to what should be termed "follow-up treatment plans." Cummings has simply noted boxes for "monitoring 231," "lifestyle 232," "medication 233," "weight control 234," and "other 235." This bears no relationship to Johnson's service support module functions.</p>
			<p>Wherein said system provides access to Social Security, annuity, and benefit information (see column 5, lines 11-18);</p>
			<p>No, Cummings does not define any access to Social Security, annuity, retirement account, and benefit information; Johnson does. Johnson's design manages the features through modules 106, 100, 108, 112, 116, 120, 126, 130, 134, 160, 166 and 164 with associated databases 102, 122, 104, 114, and 162 as well as the shared platform services of 178, 180, 182, 184, 186, 188, 190 and 192.</p>
			<p>Cummings states "... an Employer File 21a which is indicative of those employee data which affect operation and implementation of the Wellness Health Management System. Examples are employee identification data such as employee identification numbers, length of service where such length of service affects participation in and coverage under the System, coverage for dependents, and similar items." As is evident, there is not a mention of any of the accounts defined by Johnson. It is irrelevant.</p>
			<p>Wherein said medical insurer module, said health plan sponsor module, said individual service recipient module, said health care service provider module, said health care research module, and said service support</p>
			<p>No, Cummings does not define databases to support these modules nor does he either define such modules or use these health care value chain participant terms; Johnson does. As noted in Johnson's Figures 4, 5, 6, 7, 8 and 9 all modules, all databases and the processing design are shown.</p>

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7	<p>module include databases for storing information (see column 4, lines 30-39);</p> <p>Wherein said information is linked and organized by at least one indexing key (see column 4, lines 30-39, it is noted that indexing keys are utilized for linking relational databases).</p>	<p>Cummings states "Many processing systems contain substantial memory storage capacity, and the system hereof advantageously employs such memory storage capacity to record a number of important bodies of data and other information. Some of such data and information are represented by the cylinders in Fig. 1. These may either be a part of the memory of the processing system 10 or may be in other data banks that are accessible to the processing system 10." Again, no design and no functionality, no indication that Cummings has ever heard of a database, and it demonstrates a lack of knowledge about how data is defined, stored, accessed and managed.</p>	<p>No, Cummings does not define indexing keys for linking relational databases; Johnson does. Cummings doesn't even define databases nor does he apparently know that relational databases exist; therefore he certainly does not know that indexing keys are required. See comments above for the same Cummings reference.</p>
			<p>The ICC card in Johnson's invention is no different than the computers on which Johnson's system would run or communications infrastructure</p>

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			<p>which would be used to transmit data. It is all based on commercially available technology and is noted in the patent as the processing infrastructure for her system. In addition, Johnson's experience in defining a global smartcard standard for a major credit card association makes her familiar with both (1) the requirements needed to create a standard card and cardreader interface and the interconnection functions that must be defined to make a card interoperable, and (2) in the operating regulations of the major credit card associations worldwide. In both of these, Johnson has noted that Pitroda would be inoperable: his card and reader interface are not defined properly to make them workable or functional, and the operating regulations of all credit card associations would prohibit Pitroda's UET card use by any of them, as he forgoes their required service mark and operational security requirements. Pitroda's invention is inoperable as defined, and Johnson's invention uses standard ICC technology available on the open market. Pitroda's invention is therefore irrelevant to Johnson's invention.</p>
	<p>Pitroda further teaches that the portable individual information device stores health care data records for the individual (see column 5, lines 44-59). It would have been obvious to one of ordinary skill in the art of healthcare management at the time of the invention to incorporate the portable individual information device of Pitroda into the centralized health management system of Cummings. One of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of enhancing healthcare efficiency and reduce overhead costs by providing personalized storing devices.</p>	<p>Pitroda states "In one application of this invention, a health care management system is provided in which UET cards are used for inputting, storing, processing, and transmitting personal information, including personal medical history, account information, and transactional information. At least one central health care information processing system is provided, and it includes means for creating, assigning and storing patient and health care provider accounts; means for electronically communicating account information to a universal electronic transaction card; means for receiving and storing personal information for each authorized account number; means for communicating with a universal electronic transaction card to authorize account transactions, means for receiving and storing information relating to account transactions; and means for storing and communicating medical histories."</p>	<p>Yes, that is possible using a chip based card (commonly known as a smartcard), however Pitroda's invention does not state that it is ICC based, leading one skilled in card based technology to wonder how he intends his card to work. In addition, Pitroda is simply stating that this is a possible use of his UET card. Smartcards which are available freely on</p>

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8	2	As per claim 2, Cummings in view of Pitroda teach the system of claim 1 as described above. Cummings further teaches that open standards are used for hardware, software and firmware components of said system (see Figure 1 and column 4, lines 4-62).	the open market do have this capability – however none of them operate without an application designed specifically for this use. The application consists of functions at the card and card reader side and at the processing host. Johnson's invention is an application designed for health care; as stated earlier, she is not patenting a card and, as such, Pitroda is not applicable to her invention. Also, regarding the examiner's comment that "one of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of enhance healthcare efficiency and reduce overhead costs," as this has not been done in the manner of Johnson's patent, it is not obvious. Johnson notes that lack of creativity has been a major factor in the continuing lack of shared collaborative information and in the resulting high costs of health care.
9	3	As per claim 3, Cummings in view of Pitroda teach the system of claim 1 as described above. Cummings further teaches the health care research module converts said health care data on said system into one common format for use by said central host computer (see column 10, line 66 – column 11, line 10, it is assumed that test results would need to converted to a common format for use throughout the system).	Johnson's Claim 2 states "The system of Claim 1, wherein open standards are used for hardware, software, and firmware components of said system." There is nothing in Cummings Fig. 1 or anywhere in column 4, lines 4-6, nor ever anywhere in Cummings patent that even uses term "open standards" at all, much less for hardware, software or firmware components. Cummings does not understand systems and likely has never heard of the term. Open standards are defined in Johnson's invention, as Johnson is a system designer by profession and understands what is needed to create and maintain a system. Cummings is irrelevant.
			No, Cummings does not define any health care research functions, nor does he ever discuss data formats at all: Johnson does in modules 160, 166, 164 and the files and processing supporting it. Johnson's claim 3 states "The system of Claim 1, wherein said health care research module converts said health care data on said system into one common format for use by said central host computer."

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			rectangle 126 "Input Test Results and Update Record." After the records have been updated to reflect any test results that maybe applicable, provision is made for the attending physician or authorized support staff member to review the diagnosis or proposed treatment protocols and either amend or confirm his proposed course of treatment."
10	31,32, 34	<p>Claims 31,32, and 34 contains substantially similar method limitations to system limitations recited in claims 1-3 and, as such, is rejected for similar reasons given above.</p> <p>Johnson's claim 31 states "A method for collecting, conforming and consolidating information in an integrated health care system implemented using any of a global communications network, the Internet or a local area network, the method comprising steps of: maintaining, consolidating, and distributing information generated by a component of said system with at least one central host computer; providing at least one provider terminal in communication with the central host computer; wherein said provider terminal is one of a portable computer, personal information device, personal digital assistant, personal computer, or server computer; wherein the provider terminal is operable to communicate with the entire system or any portion of the system, or is operable independently from the system; providing at least one portable individual information device for accessing the system, wherein the portable individual information device stores an individual service recipient's insurance information, emergency records, and health care history; linking a card reader to the provider terminal, for accessing information stored on the portable individual information device, and for transmitting information among the portable individual information device</p>	<p>First, as stated above, Cummings has no data defined nor has he any files defined for service recipient data. There is no file that could be used for this purpose other than the open text file called "Physician File" 44, and that would have no means of accessing data as it is not a database. Second, this passage of Cummings discusses looking at test results (albeit with no means for doing so) and not for the large scale research and analysis functions defined by Johnson. Cummings has no data, no defined files, no health care research capabilities, and therefore has never even considered data formats and conversions. Third, the examiner is mistaken that this has anything to do with the functionality of Johnson's claim 3. Finally, Cummings is inoperable, as well as irrelevant to health care research.</p>

Item	Claims	Examiner Comment	Response to Examiner Comment	
			<p>and the components of the system; providing messaging services to a component of the system; wherein the service recipient's health care data records are stored on any of the central host computer, the provider terminal, or the portable individual information device; wherein the central host computer, the provider terminal, and the portable individual information device are electronically linked as a network, to permit information distribution to various locations on said network; wherein open standards are used for hardware, software and firmware components of said system.”</p>	
11	22		<p>Johnson's claim 32 states “The method of Claim 31, further comprising steps of: converting information in the system into a common format for processing by the central host computer; analyzing the information in the system; creating resulting analytical data; converting the resulting analytical data into a format readable by a component of the system; and distributing the resulting analytical data to a component of the system.”</p> <p>Johnson's claim 34 states “The method of claim 31 further comprising steps of: analyzing information collected by a component of the system; transmitting resulting analytical data to the central host computer; converting the resulting analytical data into a common format; storing the common format analytical data on the central host computer; converting the common format analytical data into a format usable by any component of the system; and distributing the converted analytical data to any component of the system.”</p> <p>Refer to all “Response to Examiner Comment” above (as they cover Johnson's claims 1-3 as stated by the examiner and also, as stated by the examiner, he is referring to the same comments against Johnson's claims 31, 32 and 34).</p>	<p>No, Cummings does not teach an integrated healthcare system, implemented using any of a global communications network, the Internet or a local area network, the system comprising: at least one central host computer for maintaining, consolidating, and distributing information generated by any component of said system; Johnson does.</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
		and distributing information generated by any component of said system (see column 4, lines 4-21, in particular Figure 1, element 10);	<p>Johnson Claim 22 states: "An integrated health care system, implemented using any of a global communications network the Internet or a local area network, the system comprising: at least one central host computer for collecting, conforming, maintaining, consolidating, and distributing information generated by any component of said system; at least one provider terminal in communication with said central host computer; wherein said provider terminal is one of a portable computer, personal information device, personal digital assistant, personal computer, or server computer; and, wherein said provider terminal is operable to communicate with said entire system or any portion of said system, or is operable independently from said system; at least one portable individual information device for accessing said system, wherein said portable individual information device stores an individual service recipient's insurance information, emergency records, and healthcare history; a card reader, linked to said provider terminal, for accessing information stored on said portable individual information device, and for transmitting information among said portable individual information device and said components of said system; a messaging module for providing messaging services to said components of said system; wherein said service recipient's health care data records are stored on said central host computer, said provider terminal, or said portable individual information device; wherein said central host computer, said provider terminal, and said portable individual information device are electronically linked as a network, to permit information distribution to various locations on said network; wherein open standards are used for hardware, software and firmware components of said system; wherein said provider terminal includes: a medical insurer module including functions for plan definition, open enrollment marketing features, automated authorization of benefits, automated referrals, and service payment accounting (note: see figure 4 and modules 100, 106, 108, 110, and 112); a health plan sponsor module including functions for open enrollment processes, maintenance of benefit plan information, and coordination, distribution, and deactivation of said portable individual information devices (note: see figure 5 and modules 120, 124 and 126); a health care service provider module including functions for maintaining service recipient records, diagnosing and treating service recipient ailments, service payment management, and</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
			<p>accounting services (note: see figure 7 and modules 140, 142, 144, and 148); a health care research module including functions for the collection of data on said system for research and analysis of health care issues (note: see figure 8 and modules 160, 166 and 164); and a service support module including functions for service parameter maintenance, product support, customer requests, and system maintenance (note: see figure 9 and modules 170, 172, 174 and 176, all managing the shared platform services 178, 180, 182, 184, 186, 188, 190 and 192, which are needed by someone "extraordinarily skilled in the art" to maintain the entire service and the core databases 146, 122, 102, 104, 114, 162 and 194 or no service at all would be possible).</p> <p>Cummings column 4, lines 4-21 defines that the system is composed of a processing system linked to a terminal, printer and monitor with a CRT screen. Figure 1, element 10 is a box labeled "Processing System." Every system will include hardware or it wouldn't be a computer system.</p> <p>Cummings does not use the term "provider terminal;" Johnson does. Same as above. Element 11 (physician office terminals), element 24 (insurance companies), element 27 (banks/financial institutions) and element 28 (employer) only show terminals in each location. Again, every system will include hardware or it wouldn't be a computer system.</p> <p>No, Cummings does not teach "provider terminal" as "one of a portable computer, personal information device, personal digital assistant, personal computer, or server computer"; Johnson does.</p> <p>Cummings states "The terminal of Fig. 2 includes a main housing 50 having a visual display window 51, a card data entry slot 52 having an elongated portion 53 and an enlarged portion 54, conventional manual data entry keyboard 55 and 10-key numeric calculator 56. It also includes conventional telephone handset cradle 57 and telephone handset 58. As will be evident from reference to Fig. 2, the terminal is operative in accordance with techniques well known in the data processing arts." This is a telephone with a display, it is not a portable computer, personal digital assistant, personal computer, or server computer. Cummings does not include the other hardware and firmware components (i.e. portable individual information device, personal</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
		<p>Wherein said provider terminal is operable to communicate with said entire system or any portion of said system, or is operable independently from said system (see column 4, lines 4-14);</p>	<p>information device, personal digital assistant, integrated circuit card, magnetic storage card, portable integrated circuit or microchip-based device, server computer, etc.) that Johnson does. It is not applicable.</p>
	<p>A messaging module for providing messaging services to a component of said system (see column 4, lines 22-29);</p>	<p>Johnson defines a communications/file transfer 192 shared platform service that is used for communications between all system participants of the health care value chain for all communication features of the system. The elements employing this particular shared platform service includes: 106, 100, 116, 108, 110, 112, 120, 124, 126, 130, 132, 134, 140, 148, 142, 144, 160, 166, 164, 170, 172, 174, and 176. This is the messaging module used for her invention.</p>	<p>Cummings does not define or design the integration of a messaging module. Cummings only comments, as correctly noted by the examiner, are "The inclusion of an electronic mail function is optional and is identified by symbol 15. As will be observed, Electronic Mail 15 is linked to Processing System 10 via link 15a. Although provision of the electronic mail is not an essential part of the invention hereof, its inclusion further increases the versatility of the system and may render it more useful in some applications." There is no functionality defined for this and his term "electronic mail" is not providing the functionality designed by Johnson for the communications/file transfer '92 shared platform service.</p>
	<p>Wherein said service recipient's health care data records are stored on said central host</p>	<p>Databases must be used to enable records to be defined, stored, accessed and managed. Cummings does not define databases nor does</p>	

Item	Claims	Examiner Comment	Response to Examiner Comment
	computer and said provider terminal (see column 4, lines 30-39);		he recognize the method by which storage is possible. Also he never uses the term "service recipient's health care data records"; Johnson does.
	Wherein said central host computer and said provider terminal are electronically linked as a network, to permit information distribution to various locations on said network (see Figure 1);	Wherein open standards are used for hardware, software, and firmware components of said system (see Figure 1 and column 4, lines 4-62);	Cummings states "Many processing systems contain substantial memory storage capacity, and the system hereof advantageously employs such memory storage capacity to record a number of important bodies of data and other information. Some of such data and information are represented by the cylinders in Fig. 1. These may either be a part of the memory of the processing system 10 or may be in other data banks that are accessible to the processing system 10." Again, no design and no functionality, no indication that Cummings has ever heard of a database, and it demonstrates a lack of knowledge about how data is defined, stored, accessed and managed.
	Wherein said provider terminal includes: a medical insurer module including functions for plan definition, open enrollment marketing features, automated authorization of benefits, automated referrals, and service accounting (see column 4, lines 53-52);	Any computer must be linked to a network for it to interoperate with other computers. Johnson's patent is for a system that makes use of standard industry available hardware and communications technology.	Never once does Cummings use the term "open standards" at all, much less for hardware, software or firmware components. Cummings does not understand systems and likely has never heard of the term. Open standards are defined in Johnson's invention, as Johnson is a system designer by profession and understands what is needed to create and maintain a system.
			No, Cummings does not define a medical insurer module including functions for plan definition, open enrollment marketing features, automated authorization of benefits, automated referrals, and service payment accounting; Johnson does in modules 106, 100, 116, 108, 110 and 112 and the files and processing supporting it. In Medical Insurer/ Benefit Providers 52 in Figure 3, Johnson has defined her users which include: benefit managers; federal, state and private insurers; business health care coalitions; employers who self-insure or manage their own benefits packages; and annuity and retirement account management organizations.

Item	Claims	Examiner Comment	Response to Examiner Comment
			<p>Although the examiner notes an impossible line sequence, it is assumed that he is referring to column 4, lines 53-62. Cummings states "For situations in which an insurance company is involved, relevant insurance company information and benefits as represented by Insurance Company File 18. Examples of pertinent information in such File 18 include the identification of covered illnesses and procedures, limits on insurance company payments for various illnesses and procedures, treatments and procedures for which utilization review is required, and treatments and procedures for which second opinions are necessary." Again, as with the rest of Cummings, there is no design included on how any of this would work. His patent is from his wording only and does not cover the features of Johnson's design.</p>
		<p>A health plan sponsor module including functions for open enrollment processes, benefit plan information maintenance, and coordination of distribution and activation or deactivation of individuals (see column 9, lines 9-25);</p>	<p>No, Cummings does not define a health plan sponsor module including functions for open enrollment processes, benefit plan information maintenance and coordination of distribution and activation or deactivation of individuals; Johnson does in modules 120, 124, 126 and in Figure 3. Johnson has defined her users which include: health and benefit plan management staff; and human resource department staff.</p> <p>Cummings column 9, lines 9-25 involves "the identification of the applicant and the authorization of the applicant to participate in the system as denoted by Is Patient Authorized rectangle 102 . . . If verification by the System reveals that the applicant is not authorized to participate, then an indication thereof is produced. This may take any of a variety of forms such as a visual or audible indication. Such an indication is represented by the rectangle 103 which contains the illustrative message Print "Sorry Not Authorized, Call 1-800-4Health." This has no bearing on Johnson's health plan sponsor module design. In addition, this message does not cover any type of functional system design – it's just a message, and is again indicative of the lack of any systems design in Cummings patent.</p>
		<p>A health care service provider module including functions for maintaining service recipient records, diagnosing and treating</p>	<p>No, Cummings does not define a health care service provider module including functions for maintaining service recipient records, diagnosing and treating service recipient ailments, managing service payments,</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
		service recipient ailments, managing service payments, accounting services (see column 6, line 44 – column 7, line 2);	accounting services; Johnson does in modules 140, 148, 142, 144 and the files and processing supporting it. Beyond that, Cummings uses only the term "physician" and does not recognize other health care service providers or their needs. In Medical Service Providers 58 in Figure 3, Johnson has defined her users which include: alliances, associations, networks and systems of providers; ambulance services; ambulatory surgery centers; donor banks including those for blood, tissue and organs; health maintenance organizations; home care agencies; hospices; hospitals; nursing homes; preferred provider organizations; physician offices; psychiatric facilities; public health departments; substance abuse programs; dental service providers; pharmacies; testing facilities; and therapeutic care providers.
		A health care research module including functions for collecting data on said system for research and analysis of health care issues (see column 10, line 66 – column 11, line 10);	Cummings column 6, line 44 through column 7, line 2 covers "The Physician File 44 is provided to represent several classes of information and data that are useful in practicing the principles of the invention. . . If symptoms are entered into the system terminal (e.g. one of terminals 11a-11c), and an identification of the corresponding illness is requested from the Processing System 10, the physician's file is interrogated and the system prepares a list of the most likely medical condition corresponding to such symptoms, together with the generally approved and/or recommended treatment protocols." There is no design defining how this would be accomplished. Cummings claim here is based only on these words and has no bearing on Johnson's health care service provider module design.

Item	Claims	Examiner Comment	Response to Examiner Comment
			<p>health care technology developers and manufacturers; health data organizations; health sciences journalists and editors; research centers; medicare peer review organizations; quality assurance companies; risk management companies; utilization review and management companies; and service providers and service recipients.</p>
			<p>Cummings states "After receiving the results of tests and/or other supporting services, the results are entered into the System. This may be performed either by manual keyboard entry or semi-automatically through the communication of appropriate information into the System electronically. This is denoted by rectangle 126 "Input Test Results and Update Record." After the records have been updated to reflect any test results that maybe applicable, provision is made for the attending physician or authorized support staff member to review the diagnosis or proposed treatment protocols and either amend or confirm his proposed course of treatment."</p>
			<p>As stated above, Cummings has no data defined nor has he any files defined for service recipient data. There is no file that could be used for this purpose other than the open text file called "Physician File" 44, and that would have no means of accessing data as it is not a database. In addition, this passage of Cummings discusses looking at test results (albeit with no means for doing so) and not for the large scale research and analysis functions defined by Johnson. Cummings has no data, no defined files, no health care research capabilities, and therefore has never even considered data formats and conversions. Cummings is inoperable, as well as irrelevant to health care research.</p>
			<p>No, Cummings does not define any service support module including functions for service parameter maintenance, product support, customer requests and system maintenance; Johnson does in modules 170, 172, 174, 176, the shared services of 178, 180, 182, 184, 186, 188, 190, 192 and the electronic output archive 194 as well as the database structures of 146, 122, 102, 104, 114 and 162, all of which are designed to enable the system to reliably maintain database, security, account, applications and communications capabilities. Cummings does not even know these requirements for a system exist.</p>

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12	<p>Cummings does not explicitly teach a portable individual information device or a card reader for accessing said system and transmitting information to the device, said device being any of an integrated circuit card, a magnetic storage card, or a portable integrated circuit or microchip based device. Pitroda teaches portable individual information device for accessing said system, said device being any of an integrated circuit card, a magnetic storage card, or a portable integrated circuit or microchip based device (see column 2, lines 44-55, in particular, the UET card is a portable integrated circuit or microchip based device).</p>	<p>In the reference made by the examiner, Cummings states "Fig 11 illustrates the aforementioned feature of Post Treatment matters." This refers to what should be termed "follow-up treatment plans." Cummings has simply noted boxes for "monitoring 231," "lifestyle 232," "medication 233," "weight control 234," and "other 235." This bears no relationship whatever to Johnson's service support module functions.</p> <p>Pitroda states "It is an object of the present invention to provide a universal electronic transaction card ("UET card") which is capable of storing, transmitting and receiving personal and transactional information and thereby replacing plastic cards, which are presently used for the same purpose. In one form of the invention, the universal electronic transaction card of the present invention is a pocket sized device, which includes a microprocessor, random access memory, a display, and input means, and is capable of storing personal information such as the card owner's name, address, date of birth, signature and likeness, as well as the user's social security number." Pitroda's invention is a card to replace existing credit cards, etc with his single UET card. His art and descriptions all involve card features and hardware interfaces. He patented the card. Johnson is not patenting a card, but instead a process which employs any of a wide array of commercially available integrated circuit cards (ICC) also known as "smartcards."</p> <p>The ICC card in Johnson's invention is no different than the computers on which Johnson's system would run or communications infrastructure which would be used to transmit data. It is all based on commercially available technology and is the hardware and firmware environment only, not part of the patented software design. In addition, Johnson's experience in defining a global smartcard standard for a major credit card association makes her familiar with both (1) the requirements needed to create a standard card and cardreader interface and the interconnection functions that must be defined to make a card interoperable, and (2) in the operating regulations of the major credit card associations worldwide. In both of these, Johnson has noted that Pitroda would be inoperable: his card and reader interface are not defined properly to make them workable or functional, and the operating regulations of all credit card associations</p>	

Item	Claims	Examiner Comment	Response to Examiner Comment
			<p>Pitroda further teaches that the portable individual information device stores health care data records for the individual (see column 5, lines 44-59).</p>
			<p>Pitroda states "In one application of this invention, a health care management system is provided in which UET cards are used for inputting, storing, processing, and transmitting personal information, including personal medical history, account information, and transactional information. At least one central health care information processing system is provided, and it includes means for creating, assigning and storing patient and health care provider accounts; means for electronically communicating account information to a universal electronic transaction card; means for receiving and storing personal information for each authorized account number; means for communicating with a universal electronic transaction card to authorize account transactions, means for receiving and storing information relating to account transactions; and means for storing and communicating medical histories."</p> <p>Yes, that is possible using a chip based card (commonly known as a smartcard), however Pitroda's invention does not state that it is ICC based, leading one experienced in card technology to wonder how he intends his card to work. In addition, Pitroda is simply stating that this is a possible use of his UET card. Smartcards which are available freely on the open market do have this capability – however none of them operate without an application designed specifically for this use. The application consists of functions at the card and card reader side and at the processing host. Johnson's invention is an application designed for health care; as stated earlier, she is not patenting a card technology but an application employing an individual information device and, as such, Pitroda is not applicable to her invention.</p> <p>In the examiner's noted section, Pitroda states "The present invention also provides for a universal electronic transactions card and communications system ("UET card and communications system") for storing, transmitting, and receiving the type of information discussed</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
13	As per claim 23, Cummings in view of Pitroda teach the system of claim 22 as described above. Cummings further teaches said health	<p>components of said system (see column 4, lines 35–41). It would have been obvious to one of ordinary skill in the art of healthcare management at the time of the invention to incorporate the portable individual information device of Pitroda into the centralized health management system of Cummings. One of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of enhance healthcare efficiency and reduce overhead costs by providing personalized storing devices.</p> <p>To be operable, cards and card readers must be based on a standardized transaction format that provides a standardized series of messages and codes between them and those transactions must be approved by ISO if they are to be used in the marketplace. Pitroda does not provide any detailed technical specifications required to make his invention operable. Johnson's experience in defining both the functional and technical specifications for a global smartcard standard for a consortium of major credit card associations makes her familiar with both (1) the requirements needed to create a standard card and cardreader interface and the transaction interconnection functions that must be defined to make a card interoperable, and (2) in the operating regulations of the major credit card associations worldwide. In both of these, Johnson has noted that Pitroda would be inoperable: his card and reader interface are not defined properly to make them workable or functional, and the operating regulations of all credit card associations would prohibit Pitroda's UET card use by any of them, as it forgoes their required service mark and operational security requirements. Pitroda's invention is inoperable as defined, and Johnson's invention uses standard ICC technology available on the open market. Pitroda's invention is therefore irrelevant to Johnson's invention.</p> <p>Also, regarding the examiner's comment that "one of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of enhance healthcare efficiency and reduce overhead costs by providing personalized storing devices," as this has not been done in the manner of Johnson's patent, it is not obvious. Johnson notes that lack of creativity has been a major factor in the continuing lack of the availability of health care records and in the resulting high costs and inaccuracies of health care.</p>	<p>above for a plurality of service institutions. The system includes a plurality of UET cards adapted to fit in a pocket or a purse and a plurality of communications interface units ("CIU").</p>
23			No, Cummings does not define a health care service provider module (which is really the service provider information module) including functions for maintaining service provider records including licensing

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	<p>care services provider module further includes a function for maintaining service provider records, including licensing information, staffing affiliations, organizational ownership information, tax identification information, curriculum vitae of licensed practitioners, as well as information regarding disciplinary actions (see column 6, line 44 – column 7, line 2).</p>		<p>information, staffing affiliations, organizational ownership information, tax identification information, curriculum vitae of licensed practitioners, as well as information regarding disciplinary action; Johnson does in module 176 and the files and processing supporting it. Beyond that, Cummings uses only the term "physician" and does not recognize or even mention any of these regulatory items.</p>
	<p>Johnson Claim 24 states: This system of Claim 23 covers the system of Claim 22 including support modules for "a medical insurer module including functions for plan definition, open enrollment marketing features, automated authorization of benefits, automated referrals, and service payment accounting (modules 100, 106, 108, 110, and 112); a health plan sponsor module including functions for open enrollment processes, maintenance of benefit plan information, and coordination, distribution, and deactivation of said portable individual information devices (modules 120, 124 and 126); a health care service provider module including functions for maintaining service recipient records, diagnosing and treating service recipient ailments, service payment management, and accounting services (modules 140, 142, 144, and 148); a health care research module including functions for the collection of data on said system for research and analysis of health care issues (modules 160, 166 and 164); and a service support module including functions for service parameter maintenance, product support, customer requests, and system maintenance (modules 170, 172, 174 and 176, all managing the shared platform services 178, 180, 182, 184, 186, 188, 190 and 192, which are needed by someone "extraordinarily skilled in the art" to maintain the entire service and the core databases 146, 122, 102, 104, 114, 162 and 194 or no service at all would be possible). The addition given in Claim 23 adds "health care service provider module further includes a function for maintenance of service provider records, including licensing information, staffing affiliations, organizational ownership information, tax identification information, curriculum vitae of licensed practitioners, and information regarding disciplinary actions against the health care service provider."</p>	<p>Cummings column 6, line 44 through column 7, line 2 covers "The</p>	<p>information, staffing affiliations, organizational ownership information, tax identification information, curriculum vitae of licensed practitioners, as well as information regarding disciplinary action; Johnson does in module 176 and the files and processing supporting it. Beyond that, Cummings uses only the term "physician" and does not recognize or even mention any of these regulatory items.</p>

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14	29	As per claim 29, Cummings in view of Pitroda teach the system of claim 23 as described above. Cummings further teaches said centralized host computer is one of a computer, or a network of linked computers having at least one central server (see column 4, lines 4-21).	<p>Physician File 44 is provided to represent several classes of information and data that are useful in practicing the principles of the invention. . . If symptoms are entered into the system terminal (e.g. one of terminals 11a-11c), and an identification of the corresponding illness is requested from the Processing System 10, the physician's file is interrogated and the system prepares a list of the most likely medical condition corresponding to such symptoms, together with the generally approved and/or recommended treatment protocols." There is no design defining how this would be accomplished. Cummings' claim here is based only on these words and has no bearing on Johnson's service provider information module.</p>
15	4, 36	Claims 4 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over	<p>Johnson's claim 4 states "The system of Claim 3, wherein said health care research module further strips the health care data of any personal</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
16	4	<p>Cummings, U.S Patent No. 5,301,105 (as previously applied) in view of Pitroda, U.S. Patent No. 5,590,038 and further in view of Edelson et al., U. S. Patent No. 5,737,539.</p>	<p>information that might compromise the anonymity of the individual service recipient from whom the health care data was collected before distributing the information to any other component of the module.” It covers the health care research module (Fig.3, element 60) supports research organizations in such areas as product development, public health, utilization and quality review, regulatory and compliance review, education, and scientific and health care research. Data warehouse queries 160 are conducted using the standardized definitions stored in the data dictionary 184. None of this is covered by Cummings, Pitroda or Edelson’s “Prescription Creation System.”</p> <p>Johnson's claim 36 states “The method of claim 32 further including a step of stripping the information of any data that might compromise anonymity of the individual from whom the information was collected. None of this is covered by Cummings, Pitroda or Edelson.</p> <p>No. Edelson controls access to patient-related data, but strips patient identifiers or aggregates data for the purpose of masking prescriber information, and this for prescription purposes only. Johnson uses stripped data for health care research purposes defined in modules 160, 166 and 164, which create queries housed in database 162 using the data dictionary 184 to query databases 122, 102, 104 and 114. In Medical Research 60 in Figure 3 Johnson has defined medical research component users including: allied health professional schools and programs; medical schools; nursing schools; public health schools; accreditation organizations; institutional licensure agencies; professional licensure agencies; disease registries; federal, state and local government policy-makers; agencies investigating legal compliance; lawyers; health care researchers and clinical investigators; health care technology developers and manufacturers; health data organizations; health sciences journalists and editors; research centers; medicare peer review organizations; quality assurance companies; risk management companies; utilization review and management companies; and service providers and service recipients. Edelson's single use is not the same as the multitude of users and their research uses defined by Johnson.</p> <p>Edelson states “Patient-confidentiality aspects of this data have been</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
		incorporate such a feature for the purpose of enhancing privacy features for patients.	addressed above and can be satisfactorily managed by controlling access to patient-related data in accordance with a patient's previously, or currently expressed wishes, as described herein. In addressing physician-oriented prescribing issues, the historical record may be rendered patient-anonymous by stripping the data of recognizable patient identifiers, or aggregating the data. The resultant historical prescribing data can communicate significant information about the prescriber, is personal and proprietary to the prescriber."
17	36	Claim 36 contains substantially similar method limitations to system claim 4 and, as such, is rejected for similar reasons given above.	Johnson's claim 36 states "The method of claim 32 further including a step of stripping the information of any data that might compromise anonymity of the individual from whom the information was collected." As the examiner is referring to claim 4, see above.
18	5,7, 24-28, 30, 33, and 35	Claims 5-7, 24-28, 30, 33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cummings, U.S. Patent No. 5,301,105 (as previously applied) in view of Pitroda, U.S. Patent No. 5,590,038 and further in view of Ertel, U.S. Patent No. 5,307,262.	Regarding Johnson claims 5-7, 24-28, 30, 33 and 35, see below.
19	5	A per claim 5, Cummings in view of Pitroda teach the system or claim 1 as described above. Cummings does not explicitly teach including a statistical analysis module for providing statistical analysis of said common-format health care data stored in said system. Ertel teaches including a statistical analysis module for providing statistical analysis of said common-format health care data stored in said system (see column 6, lines 9-23). It would have been obvious to one of ordinary skill in the art of healthcare management at the time of the invention to incorporate the data analysis feature of Ertel into the system of Cummings. One of ordinary skill in the art would have been motivated to include such a feature for the purpose of enhancing accuracy in patient records over time (see column 5,	Johnson's claim 5 states "The system of Claim 3 further including a statistical analysis module for providing statistical analysis of said common-format health care data stored in said system." The statistical analysis functions in Johnson are shown in Fig 8, modules 166 and 164. In addition in Medical Research 60 in Figure 3 she has defined users including: allied health professional schools and programs; medical schools; nursing schools; public health schools; accreditation organizations; institutional licensure agencies; professional licensure agencies; disease registries; federal, state and local government policy-makers; agencies investigating legal compliance; lawyers; health care researchers and clinical investigators; health care technology developers and manufacturers; health data organizations; health sciences journalists and editors; research centers; medicare peer review organizations; quality assurance companies; risk management companies; utilization review and management companies; and service providers and service recipients.
			Ertel does not teach a statistical analysis module for providing statistical

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lines 35-39 of Ertel).	analysis of said common-format health care data stored in said system; Johnson does in modules 166, 164 and the files and processing supporting it. In column 6, lines 9-23 Ertel states "The method also includes the steps of displaying via a system output device the patient data including the patient identifiers and the clinical data; displaying via a system output device at least one message based on the determined misreporting conditions in the patient data; automatically accumulating aggregate case data and system analysis data on a plurality of patient cases and storing the aggregate case and system analysis data in the system data files in the memory means; automatically analyzing the aggregate case data to obtain analyzed aggregate case data; and generating at least one analysis report for a plurality of patient cases based upon the analyzed aggregate case data." This analysis is the output of the DRG analysis of patient codes for maximum payment prior to the submittal of the invoice for medicare payment. It is the sole function of Ertel's system. In Column 5, lines 35-39, Ertel states "Finally, aggregate data profiles are generated that categorize data quality problems by both type and source, making it possible to identify systematic problems in data quality, intervene appropriately, and monitor subsequent progress over time." This purpose of Ertel's system to catch coding errors as they related to payment, again the single function of Ertel's system. It is irrelevant to Johnson's patent. The comment of the examiner that "one of ordinary skill in the art would have been motivated to include such a feature for the purpose of enhancing accuracy in patient records over time" is not applicable for Johnson's medical research module functions. Her user audience and their research needs are not addressed by Ertel.		Johnson claim 33 states "The method of claim 32 wherein said analyzing step further includes the step of performing statistical analysis of the information such that resulting analytical data is suitable for use in a clinical research facility; wherein the clinical research facility is a component of the system; and wherein the clinical research facility further distributes the analytical data to at least one government agency."
20	33 and 35	Claim 33 and 35 contains substantially similar method limitations to system claim 5 and, as such, is rejected for similar reasons given above.	Johnson claim 33 states "The method of claim 32 wherein said analyzing step is performed by a statistical module and wherein the statistical

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21	6	<p>As per claim 6, Cummings in view of Pitroda and Ertel teach the system of claim 5 as described above. Cummings does not explicitly teach a card reader linked to said provider terminal, for accessing and transmitting information among said portable individual information device and any of said components of said system. Pitroda teaches a card reader linked to said provider terminal, for accessing and transmitting information among said portable individual information device and any of said components of said system (see column 4, lines 35-41). It would have been obvious to one of ordinary skill in the art of health care management to incorporate this card reader feature into the system of Cummings for the reasons given above with respect to claim 1.</p>	<p>As the examiner refers to claim 5, see above.</p> <p>Johnson claim 6 states "The system of Claim 5 further comprising a card reader linked to said provider terminal, for accessing information stored on said portable individual information device, and for transmitting information among said portable individual information device and any of said components of said system."</p> <p>Pitroda column 4, lines 35-41 states "The present invention also provides for a universal electronic transactions card and communications system ("UET card and communications system") for storing, transmitting, and receiving the type of information discussed above for a plurality of service institutions. The system includes a plurality of UET cards adapted to fit in a pocket or a purse and a plurality of communications interface units ("CIU").</p> <p>As noted above, Johnson's invention uses commercially available hardware and firmware components. Also as noted above, Pitroda does not have a design for his UET card and CIU that would be able to achieve ISO standardization necessary for use in Johnson's invention. It is irrelevant to Johnson's invention.</p>
22	7	<p>As per claim 7, Cummings in view of Pitroda and Ertel teach the system of claim 6 as described above. Cummings further teaches said provider terminal is operable to communicate with said entire system or any portion of said system, or is operable independently from said system (see column 4, lines 4-14).</p>	<p>Johnson claim 7 states "The system of Claim 6, wherein said provider terminal is operable to communicate with said entire system or any portion of said system, or is operable independently from said system." Cummings column 4, lines 4-14 states "Now turning to the drawing, and more particularly Fig. 1 thereof, it will be observed that it depicts the principal components of a preferred system in accordance with the principles of the invention. Depicted there are processing system 10 which is interconnected with one or more physician office terminals 11a-11c by conventional communication paths 12. Terminals 11a-11c may be any of a variety of conventional data input terminals (e.g., such as that shown in Fig. 2 and described below) that provide for pre-recorded card</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
23	24	<p>As per claim 24, Cummings in view of Pittroda teach the system of claim 23 as described above. Cummings does not explicitly teach including a statistical analysis module for providing statistical analysis of said common-format health care data stored in said system. Ertel teaches including a statistical analysis module for providing statistical analysis of said common-format health care data stored in said system (see column 6, lines 9-23). It would have been obvious to one of ordinary skill in the art of healthcare management at the time of the invention to incorporate the data analysis feature of Ertel into the system of Cummings. One of ordinary skill in the art would have been motivated to include such a feature for the purpose of enhancing accuracy in patient records over time (see column 5, lines 35-39 of Ertel).</p>	<p>Johnson Claim 24 states: "The system of Claim 23, further comprising an integrated statistical analysis software module for providing statistical analysis of said health care data stored in said system." This system of Claim 23 covers the system of Claim 22 including support modules for "a medical insurer module including functions for plan definition, open enrollment marketing features, automated authorization of benefits, automated referrals, and service payment accounting (modules 100, 106, 108, 110, and 112); a health plan sponsor module including functions for open enrollment processes, maintenance of benefit plan information, and coordination, distribution, and deactivation of said portable individual information devices (modules 120, 124 and 126); a health care service provider module including functions for maintaining service recipient records, diagnosing and treating service recipient ailments, service payment management, and accounting services (modules 140, 142, 144, and 148); a health care research module including functions for the collection of data on said system for research and analysis of health care issues (modules 160, 166 and 164); and a service support module including functions for service parameter maintenance, product support, customer requests, and system maintenance (modules 170, 172, 174 and 176, all managing the shared platform services 178, 180, 182, 184, 186, 188, 190 and 192, which are needed by someone "extraordinarily skilled in the art" to maintain the entire service and the core databases 146, 122, 102, 104, 114, 162 and 194 or no service at all would be possible). The addition given in Claim 23 adds "health care service provider module further includes a function for maintenance of service provider records, including licensing information, staffing affiliations, organizational ownership information, tax identification information, curriculum vitae of licensed practitioners, and information regarding disciplinary actions against the health care service provider." Finally, Claim 24 covers "The system of Claim 23, further comprising an integrated statistical analysis software module for providing statistical analysis of said health care data stored in said system."</p>

Item	Claims	Examiner Comment	Response to Examiner Comment	
			<p>In column 6, lines 9-23 of Ertel's "Patient Data Quality Review Method and System" which is a processing routine that uses commercially available or public domain DRG groupers used to check codes against payment requirements and loads them into the "Grouper" program files and tables to be used by his process, he states "The method also includes the steps of displaying via a system output device the patient data including the patient identifiers and the clinical data; displaying via a system output device at least one message based on the determined misreporting conditions in the patient data; automatically accumulating aggregate case data and system analysis data on a plurality of patient cases and storing the aggregate case and system analysis data in the system data files in the memory means; automatically analyzing the aggregate case data to obtain analyzed aggregate case data; and generating at least one analysis report for a plurality of patient cases based upon the analyzed aggregate case data."</p>	
24	25		<p>In column 5, lines 35-39 Ertel states "Finally, aggregate data profiles are generated that categorize data quality problems by both type and source, making it possible to identify systematic problems in data quality, intervene appropriately, and monitor subsequent progress over time."</p>	<p>Johnson's invention covers the entire health care value chain and provides a detailed design for the creation of such a system, while Cummings does neither and Ertel deals only with the analysis of diagnosis related groups (DRGs) by a health provider organization for the purpose of maximizing their reimbursement prior to submitting invoices for payment. There is no comparison between these patents nor in the data available for analysis or the research capabilities with this data.</p> <p>No. Cummings does not teach a "billing module for calculating billing information for a service provided;" Johnson does. In Claim 25: "The system of Claim 24, further comprising a billing module for calculating billing information for a service provided to the individual service recipient." This feature uses Fig. 7 module 148 with associated database 102 as well as the shared services of 178, 180, 182, 184, 186, 188, 190, 192.</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
25	26	<p>As per claim 26, Cummings in view of Pitroda and Ertel teach the system of claim 25 as described above. Cummings further teaches an insurance benefits module for calculating available insurance benefits for a service provided to the at least one individual service recipient (see column 4, lines 53-68).</p>	<p>Cummings: "Somewhat similar considerations apply with respect to Claims File 20. There is stored detailed information covering relevant items of interest in ensuring accurate administration of claims in accordance with applicable criteria. Included are items such as those relating to claims histories, claims under review and claims in process." His Claims File 20 is only a box on a diagram with no functions or processing defined. There is no definition of "relevant items of interest" anywhere in his patent. It is inoperable.</p> <p>No. Cummings does not teach an "insurance benefits module for calculating available insurance benefits for a service provided;" Johnson does. In Johnson Claim 26: "The system of Claim 25, further comprising a insurance benefits module for calculating available insurance benefits for a service provided to the individual service recipient." This feature uses Fig. 4 module 108 with associated database 114 as well as the shared services of 178, 180, 182, 184, 186, 188, 190, 192.</p> <p>Cummings states "For situations in which an insurance company is involved, relevant insurance company information and benefits as represented by Insurance Company File 18. Examples of pertinent information in such File 18 include the identification of covered illnesses and procedures, limits on insurance company payments for various illnesses and procedures, treatments and procedures for which utilization review is required, and treatments and procedures for which second opinions are necessary. Since the system hereof contemplates compatibility with conventional insurance provisions that include patient deductibles, co-insurance by patient or another company and various other considerations that require selected individualized historical and other data to be recorded for each participant, system memory either includes or has access to files for each person as denoted by the Insured File 19." Data must be entered and processes must be defined within the system to make such a function operable. Cummings does not understand this, which is demonstrated by his comment that his information is held in "system memory." There is no RAM capability that could maintain such data and there is no means defined within Cummings invention to obtain the data necessary. His claim is only in his</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
26	27	As per claim 27, Cummings in view of Pitroda and Ertel teach the system of claim 24 as described above. Cummings further teaches a payment module for electronically transferring funds to pay a bill for services provided to the at least one individual service recipient (see column 3, lines 22-26).	<p>words and there is no design included on how any of this would work, and does not cover the features of Johnson's design.</p> <p>No. Cummings does not teach a payment module for electronically transferring funds to pay a bill for services provided to at least one individual service recipient; Johnson does. Johnson's claim 27 states "The system of Claim 24, further comprising a payment module for electronically transferring funds to pay a bill for services provided to said service recipient."</p>
27	28	As per claim 28, Cummings in view of Pitroda and Ertel teach the system of claim 24 as described above. Cummings further teaches an authorization module for authorizing service recipient treatment (see column 11, lines 37-43).	<p>Cummings states "banks or other repositories of funds are integrated into the system so as to provide automated transfer of funds to accounts of physicians and other health care providers." Cummings not only includes no definition of the process or of a design, but this is not even the method by which payments for medical services are made. Banks do not authorize payments, they provide funds transfer capabilities only and account parameters must be known and configured once authorization is secured. Cummings has no knowledge of this. Johnson's design manages these features through module 112 with associated database 114 as well as the shared services of 178, 180, 182, 184, 186, 188, 190, 192.</p> <p>No. Cummings does not teach an authorization module for authorizing service recipient treatment; Johnson does. Johnson's claim 28 states "The system of Claim 24, further comprising an authorization module for authorizing service recipient treatment." Johnson's design manages the features through modules 134, 108, 110, 144 and 142 with associated databases 102, 122, 104, 114, 162 and 146 as well as the shared platform services of 178, 180, 182, 184, 186, 188, 190 and 192.</p> <p>Cummings states "The System interrogates the Insurance Company (or other payor) files, e.g. file 18 in Fig. 1, and verifies that the ICD9 codes either meet or do not meet applicable criteria. This is noted by rectangle 128. In so doing, the expense associated with the incident is considered as a claim and is reviewed as noted by rectangle 129 'Verify Claim for Proper Treatment and Charges.'" There is no design either for the "Insurance Company File" or for the process that would be required to handle this function. Cummings only provides the two boxes of text in</p>

Item	Claims	Examiner Comment	Response to Examiner Comment
28	30	<p>As per claim 30, Cummings in view of Pitroda and Ertel teach the system of claim 24 as described above. Cummings further teaches said system provides access to any of Social Security, annuity, retirement account, and benefit information (see column 5, lines 11-18). Cummings does not explicitly teach providing comparative statistical analysis. Ertel teaches providing comparative statistical analysis (see column 15, lines 12-20). It would have been obvious to one of ordinary skill in the art of healthcare management at the time of the invention to incorporate the data analysis feature of Ertel into the system of Cummings. One of ordinary skill in the art would have been motivated to include such a feature for the reasons given above with respect to claim 24.</p>	<p>figure 6, with no definition on how this would occur. It is inoperable as well as irrelevant to the functions defined by Johnson.</p> <p>No, Cummings does not provide access to any of Social Security, annuity, retirement account, and benefit information; Johnson does. Johnson's claim 30 states "The system of Claim 24, wherein said system provides access to any of Social Security, annuity, retirement account, and benefit information, and said statistical analysis module provides comparative statistical analysis of Social Security, retirement account and benefit information." Johnson's design manages the features through modules 106, 100, 108, 112, 116, 120, 126, 130, 134, 160, 166 and 164 with associated databases 102, 122, 104, 114, and 162 as well as the shared platform services of 178, 180, 182, 184, 186, 188, 190 and 192.</p> <p>Cummings states "an Employer File 21a which is indicative of those employee data which affect operation and implementation of the Wellness Health Management System. Examples are employee identification data such as employee identification numbers, length of service where such length of service affects participation in and coverage under the System".</p> <p>Ertel states "Once patient data have been corrected, a second (i.e. followup) data set is created that permits the generation of data comparison summary reports, such as by a printer 46. Not only is it possible to contrast the quality of initial versus final (i.e. corrected) data, it is also possible to calculate the impact of the overall data correction process on hospital-based payments. Described below are two types of reports that are considered to be standard output of the system."</p>
29	Response to Arguments	<p>In the remarks filed 6/1/01 in paper number 7, Applicant argues in substance that the combination of Cummings and Pitroda fails to teach certain features as currently recited in the claims. However, these arguments are moot in view of the new grounds of rejection. It(s.p.) particular, it should be noted that the data input terminals of Cummings are now relied upon to teach the claimed provider</p>	

<i>Item</i>	<i>Claims</i>	<i>Examiner Comment</i>	<i>Response to Examiner Comment</i>
		terminal, while Pitroda is relied upon for the claimed individual information device.	